ABSTRACT

BACKGROUND AND OBJECTIVES:

Coronary artery disease is a common cause of premature morbidity and mortality in diabetic sand is often asymptomatic because of silent myocardial ischemia. Early detection of silent myocardial ischemia may prevent catastrophic cardiac events. The objectives of the present study were to study the prevalence of silent myocardial ischemia and clinical predictors of silent myocardial ischemia in asymptomatic type 2 diabetes mellitus.

MATERIALS AND METHODS:

The present one year cross sectional study was conducted at Coimbatore Medical College Hospital, Coimbatore, during the period of July 2014 to July 2015 among 50 patients of asymptomatic type 2 diabetes mellitus without clinical evidence of coronary artery disease. All the patients attending to diabetology and medicine OPD, Coimbatore Medical, Hospital were screened for eligibility. The eligible patients were administered an informed consent. The consented patients were enrolled in the present study.

Descriptive data of the participants like name, age, sex, personal history, occupation were obtained by interviewing the patients. Each of the patients proper history was recorded on predesigned and pretested proforma. They underwent thorough physical examination. All of them had normal 12 lead ECG.

RESULTS:

In the present study out of 50 patients TMT was positive in 15(30%) and negative in 35(70%).TMT was positive in 3/26(11%), 3/12(25%), 5/7(71.4%) and 4/5(80%) patients with duration of diabetes≤ 5, 6 to10, 11 to 15 and 16to20 years respectively.

INTERPRETATION AND CONCLUSION:

The prevalence of silent myocardial ischemic in asymptomatic type 2 diabetes mellitus without past history of ischemic heart disease is 30%.Longer duration of diabetes, presence of autonomic neuropathy, dyslipidemia and HbA1C levels are strong clinical predictors of silent myocardial ischemia in asymptomatic type 2 diabetes mellitus.

KEYWORDS:

Coronary artery disease; Silent myocardial ischemia; Treadmill test; Diabetes mellitus